IN THE CLAIMS:

Please cancels 1-16.

Please add the following new claims:

17. (New) An electrochemical generator that may be used as a primary or secondary electrochemical generator, the electrochemical generator comprising two electrodes supporting different electro-active materials, the electrodes being connected together by an electrolyte, wherein the electro-active material used in the composition of at least one electrode includes one of an oxide or chalcogenide of transition metals, or their at least partially lithiated form.

18. (New) An electrochemical generator in accordance with claim 17 wherein the oxide or chalcogenide of transition metals, or their at least partially lithiated form, is selected from a group consisting of TiO_2, Nb_2O_5, Wo_3, MnO_2, HfO_2, TiS_2, WS_2, $TiSe_2$, Li_xNiO_2, Li_xCoO_2, $Li_x(NiCo)O_2$, Fe_2O_3, Fe_3O_4, RuO_x, Fe_xS_2, Ru_xS_2, MoS_2, WS_2, Ir_xO_2, Ce_xO_2, $Li_xNa_yMnO_zI_n(n<1)$, In_xO_3, Ta_xO_5, SnM_xO_y, wherein M is one of a mixture of the elements in the group, or Sn_xO_2 in mesoporous form having a pore sixe of 0.001 to 10 micrometers (micron) and a specific surface area between 2 and 2000 m^2g.

19. (New) An electrochemical generator in accordance with claim 17 wherein at least one electrode is a mesoporous electrode, and wherein the mesoporous electrode has a three dimensional bicontinuous structure consisting of an interconnected solid phase material used for reversible ion intercalation and for electronic transport that is in contact with an interconnected porous space filled with electrolyte that serves for ionic transport.

20. (New) An electrochemical generator in accordance with claim 17 wherein the electro-active material is mesoporous and is prepared by precipitating a precursor compound of the electro-active material in an aqueous solution via a sol-gel

method followed by deposition of a precursor on a conductive support and sintering at a temperature between 300 and 800°C.

21. (New) An electrochemical generator in accordance with claim 17 wherein the electro-active material is mesoporous and is prepared by chemical reaction between precursor compounds in aqueous solution in the presence of surfactant micelles, and wherein the surfactant micelles act as templates to produce a desired mesoporous morphology.

22. (New) An electrochemical generator in accordance with claim 21 wherein the desired mesoporous morphology is in the form of ordered hexagonal arrays.

23. (New) An electrochemical generator in accordance with claim 17 wherein the electro-active material is composed of elongated interconnected members that are connected to other elongated members at at least two points of an aspect ratio of at least 4 and of which a small dimension of the member is smaller that 300 nm.

24. (New) An electrochemical generator in accordance with claim 17 wherein the electro-active material is prepared by inclusion of solvents to a particle or precursor and thus exerts control over the texture and morphology of the electro-active material and of the porosity of the electrode, which may be controlled from 70% to 25% by changing the ratio of oxide precursor grains versus solvent.

25. (New) An electrochemical generator in accordance with claim 17 wherein the electro-active material is mesoporous and is comprised of mesoporous beads or rods that are 5-20 micrometers (microns) that are electrically connected together by compressing, in the form of pellets or films, a mixture composed of the beads or rods, of carbon powder or conducting polymer and of a bonding material contained in solvent, andthen performing drying the mixture on at least one of a conducting support and baking at a temperature for binder or conductive matrix conversion to a desired state.

26. (New) An electrochemical generator in accordance with claim 17 wherein the electrolyte contains alkali or alkaline earth metals in cationic form.

27. (New) An electrochemical generator in accordance with claim 26 wherein the alkaline metal is lithium in the form of one of its salts chosen from a group consisting of tetrafluoroborate, hexafluorophosphate, hexafluoroantimonate, hexafluoroarsenate, trifluoromethane sulfonate, bis-(trifluorosulfonyl) imide, tris-(trifluorosulfonyl)methide, trifluoro-methanesulfonate, trifluoroacetate, tetrachloroaluminate and perfluorobutane sulfonate.

28. An electrochemical generator in accordance with claim 17 wherein the electrolyte includes an aprotic solvent selected from a group consisting of ethlyene carbonate, propylene carbonate, dimethylcarbonate, diethylcarbonate, dioxolane, butyrolactone, methoxypropionitrile, methoxy-ethoxy propionitrile, methoxy-diethoxypropionitrile, methoxyacetonitrile, tetrafluoro-propanol and combinations thereof.

29. (New) An electrochemical generator in accordance with claim 17 wherein the electrolyte includes a molen salt as a solvent for a lithium ion containing salt.

30. (New) An electrochemical generator in accordance with claim 29 wherein the molten salt is selected from a group consisting of methyl-ethyl-imidazolium trifluoromethansulfonate, methyl-ethyl-imidazolium bis (trifluorosulfonyl) imide and alkylguanidinium bis (trifluorosulfonyl) imide.

31. (New) An electrochemical generator in accordance with claim 26 wherein the electro-active material of at least one of the electrodes is capable of forming an intercalation compound with the alkali or alkaline earth metal.

32. (New) An electrochemical generator in accordance with claim 17 wherein the electro-active material of one electrode is composed of $Ti0_2$ in anatase form having a mesoporous structure.

33. (New) An electrochemical generator in accordance with claim 17 wherein one of the two electrodes is a negative electrode and the other is a positive electrode, and the negative electrode includes mesoporous $Ti0_2$ and the composition of the positive electrode includes $Li_yMn_2O_4$ ($y<2$) in amorphous or crystalline form, and wherein the electrolyte is composed of a 1M solution of lithium bis-(trifluorosulfonyl) imede in methoxypropionitrile as a solvent.

34. (New) An electrochemical generator in accordance with claim 17 wherein the electro-active material is mesoporous and is comprised of mesoporous beads or rods that are 5-20 micrometer (micron) and form an electrode by templated ordering, manipulative stacking or arrangement of the 5-20 micrometer (micron) mesoporous particles.

35. (New) An electrochemical generator in accordance with claim 32 further comprising a separator that is a porous or mesoporous, high porosity insulating material arranged in forms of continuous layers or particle spacers, and a current collector-substrate that is selected from a group consisting of carbon, graphite paper, stainless steel, titanium or aluminum alloy and DSA.

36. (New) An electrochemical generator in accordance with claim 35 wherein the insulating material is selected from a group consisting of zirconia, alumina, glass and polypropylene.